

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 Listing of Claims:

1-27. (Canceled)

28. (Currently amended) An insulated electrical wire comprising

1) a metallic conductor, and

10 2) insulation which comprises

(i) a first layer which is composed of a first polymeric composition
comprising [consisting of] a first polymeric component [and optionally a first non-
polymeric component, the first polymeric component] comprising at least 60% by
weight, based on the weight of the first polymeric component, of a

15 carbonyl-containing polymer having a non-aromatic backbone and comprising at
least 5% by weight, based on the weight of the carbonyl-containing polymer, of
repeating units derived from a monomer which can be copolymerized with an
olefinic monomer and which contains a carboxylic acid ester group, and

(ii) a second layer which is in direct contact with the first layer at an interface,
20 and which is composed of a second polymeric composition comprising [consisting
of] a second polymeric component [and optionally a second non-polymeric
component, the second polymeric component] comprising at least 50% by weight,
based on the weight of the second polymeric composition, of [at least one of]
polyvinylidene fluoride (PVDF) or [and] a vinylidene fluoride (VDF) copolymer
25 consisting essentially of

(a) repeating units derived from vinylidene fluoride, and

(b) repeating units derived from a fluorinated comonomer;

the first layer being positioned between the conductor and the second layer.

29. (Currently amended) An insulated wire according to claim 28 [1] wherein the first and second layers have been subjected, while in direct contact with each other, to conditions which cause crosslinking of polymers at the interface between them.

5 30. (Currently amended) An insulated wire according to Claim 29 wherein the crosslinking of polymers at the interface is such that at least one of the following conditions is fulfilled:

(a) the peel bond strength between the layers, measured by ASTM 81876- 95, is at least 5N,

10 (b) when a sample of the insulated electrical wire 60 mm long is immersed to a depth of 42 mm in a bath of acetone [4.2 mm deep] at 23 °C for 1 hour, there is no delamination of the two layers, and

(c) the peel bond strength between the layers after the crosslinking, measured by ASTM B1876-95, is at least 100% greater than the peel bond strength between the layers before the crosslinking, measured by ASTM B1876-95.

15 31. (Currently amended) An insulated wire according to claim 28 wherein the first polymeric component consists essentially of the carbonyl-containing polymer and polyethylene. [a polyolefin].

20 32. (Previously presented) An insulated wire according to claim 31 wherein the first polymeric component consists essentially of the carbonyl-containing polymer and high density polyethylene.

25 33. (Previously presented) An insulated wire according to claim 28 wherein the second polymeric composition comprises at least 50% by weight, based on the weight of the second polymeric composition, of a copolymer of VDF and hexafluoropropylene (HFP).

30 34. (Previously presented) An insulated wire according to Claim 33 wherein the copolymer of VDF and HFP contains 8 to 12 % by weight, based on the weight of the copolymer, of units derived from HFP.

35. (Currently amended) An insulated wire according to Claim 28 wherein the second layer is substantially transparent, and consists essentially of PVDF or the VDF copolymer [or both].

5 36. (Currently amended) An insulated wire according to claim 28 wherein at least one of the first and second layers contains [, in addition to the polymeric component, a non-polymeric component comprising] at least one additive selected from antioxidants, pigments, fillers and flame retardants.

10 37. (Currently amended) An insulated electrical wire comprising

- 1) a metallic conductor, and
- 2) insulation which comprises
 - (i) a first layer which is composed of a first polymeric composition comprising [consisting of] a first polymeric component [and optionally a first non-
15 polymeric component, the first polymeric component] consisting essentially of 60 to 100% by weight, based on the weight of the first polymeric composition, of a carbonyl-containing polymer, and 0 to 40% by weight, based on the weight of the first polymeric composition, of a polyolefin, the carbonyl-containing polymer having a non-aromatic backbone and consisting essentially of
 - 20 (a) 9 to 100% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefin and which contains a carboxylic acid ester group, and
 - (b) 91 to 0% by weight, based on the weight of the carbonyl-
25 containing polymer, of repeating units derived from an olefin; and
 - (ii) a second layer which is in direct contact with the first layer at an interface, and which is composed of a second polymeric composition comprising [consisting of] a second polymeric component [and optionally a second non-polymeric component, the second polymeric component] comprising 90 to 100% by weight,
30 based on the weight of the second polymeric composition, of [at least one of]

polyvinylidene fluoride (PVDF) or [and] a vinylidene fluoride (VDF) copolymer consisting essentially of

- (a) repeating units derived from vinylidene fluoride, and
- (b) repeating units derived from a fluorinated comonomer;

5 the first layer being positioned between the conductor and the second layer.

38. (Previously presented) An insulated wire according to Claim 37 wherein the first and second layers have been subjected, while in direct contact with each other, to ionizing radiation which causes cross-linking of polymers at the interface, and at least one of the layers, before the
10 layers are subjected to the ionizing radiation, contains a radiation cross-linking promoter.

39. (Currently amended) An insulated wire according to Claim 38 wherein the crosslinking of polymers at the interface is such that, when a sample of the insulated electrical wire 60 mm long is immersed to a depth of 42 mm in a bath of acetone [4.2 mm deep] at 23 °C for 1 hour,
15 there is no delamination of the two layers.

40. (Currently amended) An insulated wire according to Claim 37 wherein the first polymeric [modified polyolefin] composition comprises 80 to 100% by weight, based on the weight of the first polymeric component, of the carbonyl-containing polymer.
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41. (Previously presented) An insulated wire according to Claim 37 wherein the carbonyl-containing polymer contains at least 15% by weight, based on the weight of the carbonyl-containing polymer, of the repeating units containing a carboxylic acid ester group.

25 42. (Previously presented) An insulated wire according to Claim 37 wherein the carbonyl-containing polymer contains 15 to 28% by weight, based on the weight of the carbonyl-containing polymer, of the repeating units containing a carboxylic acid ester group.

43. (Previously presented) An insulated wire according to Claim 37 wherein the repeating
30 units containing a carboxylic acid ester group comprise units derived from vinyl acetate.

44. (Previously presented) An insulated wire according to Claim 37 wherein the repeating units containing a carboxylic acid ester group comprise units derived from an alkyl acrylate.

5 45. (Previously presented) An insulated wire according to Claim 37 wherein the alkyl acrylate is one or both of ethyl acrylate and methyl acrylate.

46. (Previously presented) An insulated wire according to Claim 37 wherein the first polymeric component consists essentially of high-density polyethylene and at least 80% of the
10 carbonyl-containing polymer.

47. (Currently amended) An insulated electrical wire comprising

1) a metallic conductor, and

2) insulation which comprises

15 (i) a first layer which surrounds and directly contacts the metallic conductor, and which is composed of a first polymeric composition comprising [consisting of] a first polymeric component [and optionally a first non-polymeric component, the first polymeric component] consisting essentially of 60 to 100% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer, and 0 to 40%
20 by weight, based on the weight of the first polymeric component, of polyethylene, the carbonyl-containing polymer having a non-aromatic backbone and consisting essentially of

(a) 15 to 28% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from an alkyl acrylate, and

25 (b) 85 to 72% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from ethylene; and

(ii) a second layer which surrounds and directly contacts the first layer and which is composed of a second polymeric composition comprising [consisting of] a second polymeric component [and optionally a second non-polymeric component, the first
30 polymeric component] comprising 90 to 100% by weight, based on the weight of the

second polymeric composition, of a vinylidene fluoride (VDF) copolymer consisting essentially of

(a) 88 to 92% by weight, based on the weight of the VDF copolymer, of repeating units derived from vinylidene fluoride, and

5 (b) 8 to 12% by weight, based on the weight of the VDF copolymer, of repeating units derived from a fluorinated comonomer.

48. (Previously presented) An insulated wire according to Claim 47 wherein the first and second layers have been subjected, while in direct contact with each other, to ionizing radiation
10 which causes cross-linking of polymers at the interface, and at least one of the layers contains a radiation cross-linking promoter.

49. (Currently amended) An insulated wire according to Claim 48 wherein the crosslinking of polymers at the interface is such that, when a sample of the insulated electrical wire 60 mm
15 long is immersed to a depth of 42 mm in a bath of acetone [4.2 mm deep] at 23 °C for 1 hour, there is no delamination of the two layers.

50. (Previously presented) An insulated wire according to Claim 47 wherein the alkyl acrylate is one or both of ethyl acrylate and methyl acrylate.
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51. (Currently amended) A method of making an insulated wire, the method comprising the steps of

(A) providing a metallic [an electrical] conductor surrounded by

(i) a first layer which is composed of a first polymeric composition comprising
25 [consisting of] a first polymeric component [and optionally a first non-polymeric component, the first polymeric component] comprising at least 60% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer having a non-aromatic backbone and comprising [containing] at least 5% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer

which can be copolymerized with an olefinic comonomer and which contains a carboxylic acid ester group; and

(ii) a second layer which is composed of a second polymeric composition comprising [consisting of] a second polymeric component [and optionally a second non-polymeric component, the second polymeric component] comprising at least 50% by weight, based on the weight of second polymeric composition, of [a fluoropolymer which is at least one of] polyvinylidene fluoride (PVDF) or [and] a vinylidene fluoride (VDF) copolymer consisting essentially of

(a) repeating units derived from vinylidene fluoride, and

(b) repeating units derived from a fluorinated comonomer;

the first and second layers being in direct contact with each other at an interface, and the first layer being positioned between the conductor and the second layer; and

(B) exposing the layers while in contact with each other to ionizing radiation which causes cross-linking of polymers at the interface.

52. (Previously presented) A method according to Claim 51 wherein step (A) comprises bringing the respective layers into contact with each other at a temperature above the melting or softening point of the polymeric material in at least one of the layers.

53. (Previously presented) A method according to Claim 51 wherein step (A) includes pressure-extruding layer (i) onto the conductor.

54. (Previously presented) A method according to Claim 51 wherein step (A) comprises coextruding the layers (i) and (ii) onto the conductor in a single pass of the conductor from an extrusion process pay-out device to an extrusion process take-up device.

55. (Previously presented) A method according to Claim 51 wherein the first polymeric composition contains a cross-linking promoter which is a multifunctional acrylate or methacrylate ester.

56. (Previously presented) A method according to Claim 51 wherein the second polymeric composition contains a cross-linking promoter which is a multifunctional acrylate or methacrylate ester.